



Product Catalogue

simplifying networks

LICENCE-FREE OPERATION

No need to obtain frequency licenses for the operators of laser based wireless cabling solutions.

COST-EFFECTIVE

Installation is a ONE-TIME investment with no recurring costs. Eliminates lease line costs.

INVESTMENT PROTECTION

Industry standard network interfaces and a clear upgrade path for higher bandwidth protects your investment in Trimble FSO solutions.

EYE SAFETY

Trimble FSO systems are designed and manufactured for eye-safe operation in compliance with the relevant EN, IEC and US standards. This ensures safe deployment and operation of Trimble FSO products.



technology at work for you

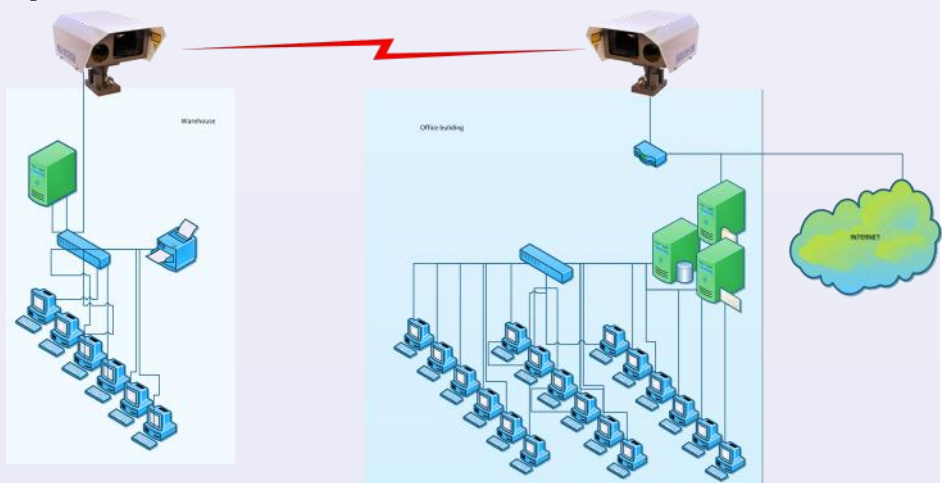
CONNECTING YOUR BUSINESS WITHOUT BOUNDRIES

Trimble FSO Product line offers a flexible point to point connection at real wire-speed. No tricks with the bandwidth, no compression. The latency is lower than the radio technology, and there are no health concerns. Easily re-deployable, and there are no interference nor channel selection issues, no crosstalk problems. The system is safe to use even in crowded areas due to the concentrated transmission. The use of the latest innovative technology achievements turns the unit into the highest power budget FSO systems available on the market.

flexible solutions for your business needs

OUR MISSION IS YOUR TRANSMISSION

Trimble FSO offers products for every need. The configuration of the systems can be flexibly configured.



What is free space optics?



FLEXIBILITY

Trimble FSO systems are divided into distance ranges – customers select the system that matches their needs. They can be deployed in a wide variety of network architecture applications, including point-to-point, ring architecture and mesh systems.

SECURE DATA TRANSMISSION

Trimble FSO free space transmission is one of the safest transmission methods. Direct interception is virtually impossible with the concentrated beam and physical placement of the equipment.

EXCELLENT PRICE/PERFORMANCE

Trimble FSO systems have outstanding low cost per bit ratios – are among the best in the industry.

NO INTERFERENCE

Use of infrared light for communication means no interference issues.

HIGH BANDWIDTH, HIGH SPEED

Optical free space data transmission matches the bandwidth and speed of fixed optical fibre.

Imagine an outdoor wireless technology that offers full-duplex Gigabit Ethernet throughput. A technology that can be installed license-free worldwide, and can be installed in less than a day. A technology that offers high security and a fast, high ROI. That technology is free-space optics Trimble Free Space Optics (FSO). This line-of-sight technology approach uses invisible beams of light to provide optical bandwidth connections. It's capable of sending up to 1.25 Gbps full duplex of data, voice, and video communications simultaneously through the air — enabling fiber-optic connectivity without requiring physical fiber-optic cable. It enables optical communications at the speed of light. And it forms the basis of a new category of products — optical wireless products from Trimble FSO, the recognized leader in outdoor wireless bridging communications. Trimble FSO provides high-speed connections, across Enterprises and between cell-site towers; it is the best technology available. FSO is a line-of-sight technology that uses invisible beams of light to provide optical bandwidth connections that can send and receive voice, video, and data information. Today, FSO technology — the foundation of Trimble FSO optical wireless offerings — has enabled the development of a new category of outdoor wireless products that can transmit voice, data, and video at bandwidths up to 1.25 Gbps. This optical connectivity doesn't require expensive fiber-optic cable or securing spectrum licenses for radio frequency (RF) solutions. FSO technology requires light. The use of light is a simple concept similar to optical transmissions using fiber-optic cables; the only difference is the medium. Light travels through air faster than it does through glass, so it is fair to classify FSO technology as optical communications at the speed of light.

Trimble FSO Gigabit Series combines the speed and security of industry-leading 7th generation optical wireless technology with radio frequency transmission. Based on over 15 years of wireless experience, we've designed these bridges for maximum performance and unbeatable ROI. You will have the peace of mind of knowing that your network has the industry's fastest and most secure wireless technology and availability up to 99.999% —under all weather conditions. This makes Trimble FSO Gigabit and AT Series a safe future proof investment.

100Mb 200-3000m Auto Tracking Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 2x35mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 100 Mbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 22 kg |
| Dimensions (with cover and alignment Unit) | 690x320x360 mm |

Optical characteristics

| | |
|-------------------|----------------------------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad, Auto Focus function |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |
| Power to the Head | 48V Power Supply |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Fade Margin @ 3000m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 24 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 16 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXAT3000FT | 100Mb Ethernet IF 200-3000m distance laser link. 48V power supply, installation kit and SNMP web management included. |
| PXAT3000FTH | 100Mb Ethernet IF 200-3000m distance laser link. 48V power supply, installation kit and SNMP web management included, with heater. |

Gigabit 200-3000m Auto Tracking Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 2x25 mW |
| Detector | SiAPD Photo diode |
| Dynamic range | ~35dB |
| Bandwidth | 1.25Gbps |
| Management | Web based SNMP compatible In-band management |
| System latency | <50ns |
| Backup function | Switch |

Physical characteristics

| | |
|--|-------------------|
| Head housing | Aluminium Alloy |
| Weight | 22 kg |
| Dimensions (with cover and alignment Unit) | 690 x 320 x 360mm |

Optical characteristics

| | |
|-------------------|-------------------------------|
| Wavelength | 785 nm |
| Beam divergence | 2—5 mRad, Auto Focus Function |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |
| Power to the head | 48V Power Supply |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

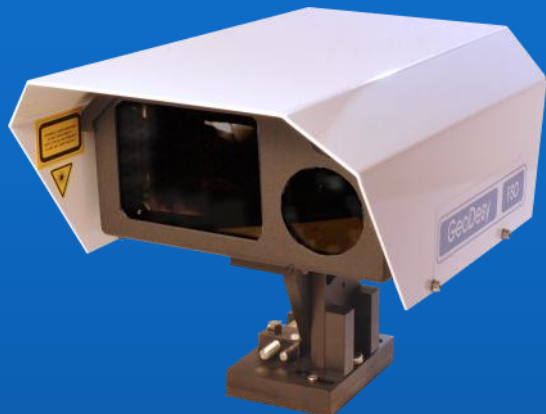
Fade Margin @ 3000m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 25 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 17 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXATW3000GT | Gigabit TX/FX Ethernet IF 200-3000m distance laser link. 48V power supply, installation kit and SNMP web management included. With Auto Back-up function. |
| PXATW3000GTH | Gigabit TX/FX Ethernet IF 200-3000m distance laser link. 48V power supply, installation kit and SNMP web management included. With Auto Back-up function, with heater. |

100 Mb 100-500m Auto Focus Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 1x35mW |
| Detector | APD Photodiode |
| Dynamic range | ~30dB |
| Bandwidth | 100Mbps |
| Management | Web based SNMP compatible In-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8 kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|-----------|
| Wavelength | 785 nm |
| Beam divergence | 1—10 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power Required | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | POE injector |

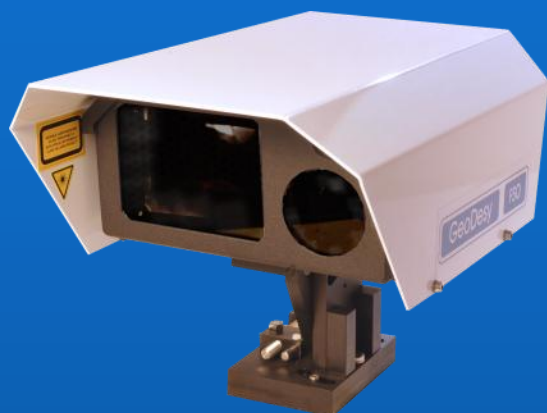
Fade margin @ 500 m

| | |
|--|------------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | Max: 30 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | Max: 27 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | Max: 20dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXAF500FT | 100Mb TX Ethernet IF 100-500m distance laser link. POE power supply, installation kit and SNMP web management included, with Auto Focus. |
| PXAF500FTH | 100Mb TX Ethernet IF 100-500m distance laser link. POE power supply, installation kit, SNMP web management included and with Auto Focus and with heater. |

100 Mb 500-1000m Auto Focus Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 1x35mW |
| Detector | SiAPD Photo diode |
| Dynamic range | ~35dB |
| Bandwidth | 100Mbps |
| Management | Web based SNMP compatible In-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8 kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|-----------|
| Wavelength | 785 nm |
| Beam divergence | 1—10 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power required | IEEE 802.3af (Power over Ethernet) |
| Power to the head | IEEE 802.3af (Power over Ethernet) |
| Power to the head | POE injector |

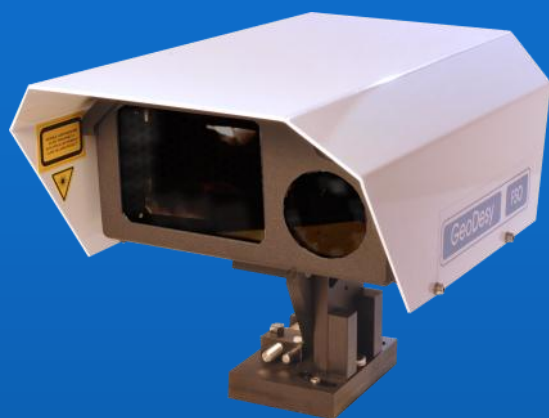
Fade Margin @ 1000m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 25 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 17 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXAF1000FT | 100Mb TX Ethernet IF 500-1000m distance laser link. POE power supply, installation kit and SNMP web management included with Auto Focus. |
| PXAF1000FTH | 100Mb TX Ethernet IF 500-1000m distance laser link. POE power supply, installation kit and SNMP web management included with Auto Focus and with heater. |

Gigabit 100-500m Auto Focus Laser Link



Electrical characteristics

| | |
|-------------------|---|
| Light source | Laser Diode |
| Laser diode power | 1x 25 mW |
| Detector | SiAPD Photodiode |
| Dynamic range | ~35dB |
| Bandwidth | 1.25Gbps |
| Management | Web based SNMP compatible Out-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8 kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|----------------------------------|
| Wavelength | 785 nm |
| Beam divergence | 1—10 mRad, Manual Focus Function |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power Required | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | POE injector |

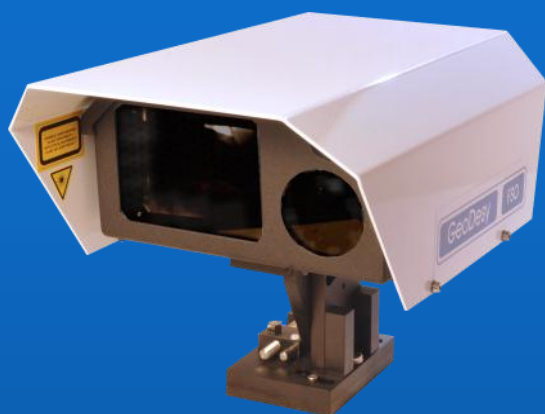
Fade Margin @ 500m

| | |
|--|-----------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | Max 29 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | Max 23 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | Max 16 dB |

Order Information

| Product Code | Description |
|--------------|---|
| PXAFW500GT | Gigabit TX/FX Ethernet IF 100-500m distance laser link. POE power supply, installation kit, SNMP web management included, with Auto Focus and Auto Back-up function. |
| PXAFW500GTH | Gigabit TX/FX Ethernet IF 100-500m distance laser link. POE power supply, installation kit, SNMP web management included, with Auto Focus and Auto Back-up function, with heater. |

Gigabit 20-400m Manual Focus Laser Link



Electrical characteristics

| | |
|-------------------|---|
| Light source | Laser Diode |
| Laser diode power | 1x25 mW |
| Detector | SiAPD Photodiode |
| Dynamic range | ~35dB |
| Bandwidth | 1.25Gbps |
| Management | Web based SNMP compatible Out-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|---------------------------------|
| Wavelength | 785 nm |
| Beam divergence | 2—5 mRad, Manual Focus Function |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power Required | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | POE injector |

Fade Margin @ 400 m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 23 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 19 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 14 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXMFW400GT | Gigabit TX/FX Ethernet IF 20-400m distance laser link. POE power supply, installation kit, and SNMP web management included. Manual Beam Focus with Auto Back-up function. |
| PXMFW400GTH | Gigabit TX/FX Ethernet IF 20-400m distance laser link. POE power supply, installation kit, and SNMP web management included. Manual Beam Focus with Auto Back-up function and with heater. |
| PXMF400GT | Gigabit TX/FX Ethernet IF 20-400m distance laser link. POE power supply, installation kit, and SNMP web management included. Manual Beam Focus. |
| PXMF400GTH | Gigabit TX/FX Ethernet IF 20-400m distance laser link. POE power supply, installation kit, and SNMP web management included. Manual Beam Focus and with heater. |

Gigabit 400-650m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 2x25 mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 1,25 Gbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |
| Backup function | Switch |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 10kg |
| Dimensions (with cover and alignment Unit) | 560x324x298 mm |

Optical characteristics

| | |
|-----------------|-------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-----------------------|
| Operating temperature | -40 to +60 Centigrade |
| Storage temperature | -60 to +80 Centigrade |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|--|
| Power Required | IEEE 802.3af (Power over Ethernet) 18W w/o heating w heating 28W |
| Power to the Head | IEEE 802.3af (Power over Ethernet) 18W w/o heating w heating 28W |
| Power to the Head | POE injector |

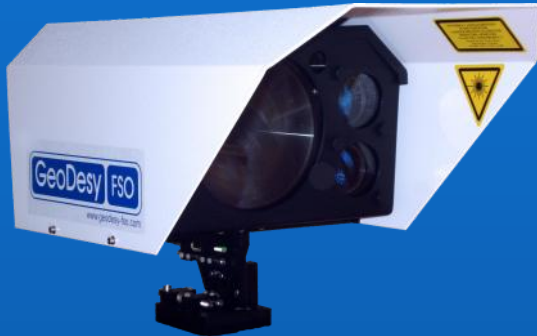
Fade Margin @ 650m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 24 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 16 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXW650GT | Gigabit TX/FX Ethernet IF 400-650m distance laser link. POE power supply, installation kit and SNMP web management included. With Auto Back-up function. |
| PXW650GTH | Gigabit TX/FX Ethernet IF 400-650m distance laser link. POE power supply, installation kit and SNMP web management included. With Auto Back-up function and with heater. |

Gigabit 650-3500m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 8x25mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 1,25 Gbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |
| Power to the Head | 48 V Power Supply |
| Backup Function | Switch |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 26kg |
| Dimensions (with cover and alignment Unit) | 560x324x298 mm |

Optical characteristics

| | |
|-------------------|-------------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |
| Power to the Head | 48 V Power supply |

Environment

| | |
|------------------------------|-----------------------|
| Operating temperature | -40 to +60 Centigrade |
| Storage temperature | -60 to +80 Centigrade |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Fade Margin @ 3500m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 34 dB |
| Medium visibility (Fog 10dB/Km Rain ~30mm/h) | 12 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXW3500GT | Gigabit Ethernet IF 650-3500m distance laser link. 48 V power supply, installation kit and SNMP web management included. With Auto Back-up function. |
| PXW3500GTH | Gigabit Ethernet IF 650-3500m distance laser link. 48 V power supply, installation kit and SNMP web management included. With Auto Back-up function and with heater. |

100 Mb 20-350m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 1x35mW |
| Detector | SiPIN Photodiode |
| Dynamic range | ~30dB |
| Bandwidth | 100Mbps |
| Management | Web based SNMP compatible In-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8 kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|----------|
| Wavelength | 785 nm |
| Beam divergence | 2—5 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power Required | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | IEEE 802.3af (Power over Ethernet) |
| Power to the Head | POE injector |

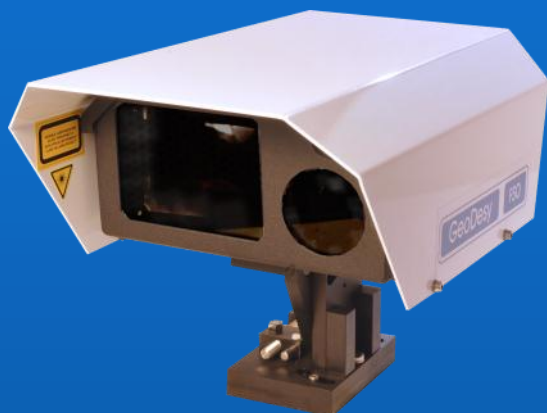
Fade Margin @ 350 m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 24 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 20 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 15 dB |

Order Information

| Product Code | Description |
|--------------|---|
| PX200FT | 100Mb TX Ethernet IF 20-200m distance laser link. POE power supply, installation kit, and SNMP web management included. |
| PX200FTH | 100Mb TX Ethernet IF 20-200m distance laser link. POE power supply, installation kit, and SNMP web management included, with heater. |
| PX350FT | 100Mb TX Ethernet IF 20-0350m distance laser link. POE power supply, installation kit, and SNMP web management included. |
| PX350FTH | 100Mb TX Ethernet IF 200-350m distance laser link. POE power supply, installation kit, and SNMP web management included, with heater. |

100 Mb 350-650m Manual Focus Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 1x35mW |
| Detector | SiAPD Photo diode |
| Dynamic range | ~35dB |
| Bandwidth | 100Mbps |
| Management | Web based SNMP compatible In-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|--------------------|
| Head housing | Aluminium Alloy |
| Weight | 8 kg |
| Dimensions (with cover and alignment Unit) | 390 x 258 x 290 mm |

Optical characteristics

| | |
|-----------------|----------|
| Wavelength | 785 nm |
| Beam divergence | 2—5 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|------------------------------------|
| Power required | IEEE 802.3af (Power over Ethernet) |
| Power to the head | IEEE 802.3af (Power over Ethernet) |
| Power to the head | POE injector |

Fade Margin @ 650m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 25 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 17 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PXMF650FT | 100Mb TX Ethernet IF 350-650m distance laser link. POE power supply, installation kit and SNMP web management included. Manual beam focus. |
| PXMF650FTH | 100Mb TX Ethernet IF 350-650m distance laser link. POE power supply, installation kit and SNMP web management included. Manual beam focus and with heater. |

100Mb 650-1800m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 2x35mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 100 Mbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 10 kg |
| Dimensions (with cover and alignment Unit) | 560x324x298 mm |

Optical characteristics

| | |
|-----------------|-------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|--|
| Power Required | IEEE 802.3af (Power over Ethernet) 11W w/o heating w heating 21W |
| Power to the Head | IEEE 802.3af (Power over Ethernet) 11W w/o heating w heating 21W |
| Power to the Head | POE injector |

Fade Margin @ 1800m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 24 dB |
| Medium visibility (Fog 15dB/Km Rain ~50mm/h) | 16 dB |
| Low visibility (Fog 30dB/Km Rain ~130mm/h) | 7 dB |

Order Information

| Product Code | Description |
|--------------|--|
| PX1800FT | 100Mb TX Ethernet IF 650-1800m distance laser head. POE power supply, installation kit and SNMP web management included. |
| PX1800FTH | 100Mb TX Ethernet IF 650-1800m distance laser head. POE power supply, installation kit and SNMP web management included with heater. |

100Mb 1800-3000m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 4x35mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 100 Mbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 15 kg |
| Dimensions (with cover and alignment Unit) | 560x324x298 mm |

Optical characteristics

| | |
|-----------------|-------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Power

| | |
|-------------------|--|
| Power Required | IEEE 802.3af (Power over Ethernet) 11W w/o heating w heating 21W |
| Power to the Head | IEEE 802.3af (Power over Ethernet) 11W w/o heating w heating 21W |
| Power to the Head | POE injector |

Fade Margin @ 3000m

| | |
|--|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 30 dB |
| Medium visibility (Fog 10dB/Km Rain ~30mm/h) | 16 dB |

Order Information

| Product Code | Description |
|--------------|---|
| PX3000FT | 100Mb TX Ethernet IF 1800-3000m distance laser link. POE power supply, installation kit and SNMP web management included. |
| PX3000FTH | 100Mb TX Ethernet IF 1800-3000m distance laser link. POE power supply, installation kit and SNMP web management included with heater. |

100Mb 3000-5000m Laser Link



Electrical characteristics

| | |
|-------------------|--|
| Light source | Laser Diode |
| Laser diode power | 8x35mW |
| Detector | SiAPD Photodiode |
| Dynamic range | >40dB |
| Bandwidth | 100 Mbps |
| Management | Web based SNMP compatible in-band management |
| System latency | <50ns |
| Power to the Head | 48 V Power Supply |

Physical characteristics

| | |
|--|-----------------|
| Head housing | Aluminium Alloy |
| Weight | 26 kg |
| Dimensions (with cover and alignment Unit) | 560x324x298 mm |

Optical characteristics

| | |
|-------------------|-------------------|
| Wavelength | 785 nm |
| Beam divergence | 0.5-15 mRad |
| Receiver angle | 8.5 mRad |
| Laser class | Class 1M |
| Power to the Head | 48 V Power Supply |

Environment

| | |
|------------------------------|-------------------|
| Operating temperature | -40 to +60 °C |
| Storage temperature | -60 to +80 °C |
| Humidity | 95% non condensed |
| Laser head protection rating | IP65 |

Fade Margin @ 5000m

| | |
|---|-------|
| Normal visibility (Fog 3dB/Km Rain ~6mm/h) | 31 dB |
| Medium visibility (Fog 8dB/Km Rain ~20mm/h) | 6 dB |

Order Information

| Product Code | Description |
|--------------|---|
| PX5000FT | 100Mb TX Ethernet IF 3000-5000m distance laser link. 48 V power supply, installation kit and SNMP web management included. |
| PX5000FTH | 100Mb TX Ethernet IF 3000-5000m distance laser link. 48 V power supply, installation kit and SNMP web management included, with heater. |

Your distributor



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